

ANNUAL COMPLIANCE REPORT OF MISSOURI PUBLIC WATER SYSTEMS

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MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

2015

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Note from the Branch Chief

Missouri is blessed with an abundance of high-quality water supplied by its many underground aquifers and major river networks. These sources provide Missourians with water not only for drinking but for a myriad of household and other purposes. It is critical that water provided to the public be safe and abundant.

In Missouri, the Public Drinking Water Branch of the Missouri Department of Natural Resources has the responsibility for implementing the Safe Drinking Water Act and ensuring that the state's 2,732 public water systems provide safe drinking water. To do this, the department sets limits and monitors for 91 different chemical and microbiological contaminants that could be found in public water supplies. This report provides information on how well Missouri's public water systems are doing in regard to meeting these standards.

This report is the 20th Annual Compliance Report produced by the department. It contains compliance statistics for Missouri's public water systems for calendar year 2015. The department prepares this report not only to comply with statutory obligations mandated by the federal Safe Drinking Water Act, but also to focus attention and provide an understanding of the importance of quality drinking water to the public. This report will be provided to the U.S. Environmental Protection Agency for inclusion in a national report that summarizes the performance of the nation's public drinking water systems. The report shows Missouri's water systems continued to provide safe and reliable drinking water, but also show there are still remaining challenges to overcome.

In Missouri, the Total Coliform Rule monitoring and maximum contaminant level requirements generate the most violations. This reflects the relatively high frequency of monitoring and vulnerability of water systems to bacteriological contamination, as well as the fact that it is a rule that applies to every public water system. The Groundwater Rule implementation is closely aligned with the Total Coliform Rule and compliance with it can also be a challenge as Missouri has a large number of very small public water systems that use well water as their source.

A significant number of systems are experiencing difficulty complying with disinfection byproduct (DBP) requirements. More stringent requirements under the Stage 2 DBP Rule began going into effect in 2012, requiring secondary water systems to meet the DBP standards also. Since water age can exacerbate DBP levels, there will likely be significant compliance challenges for some secondary water systems to overcome.

Compliance with Consumer Confidence Report requirements continues to be a challenge. The department has worked hard to assist the community water systems with this workload by hosting the reports on the department's website, which has helped reduce the cost to systems of meeting this requirement and has improved compliance.

Implementation of the Long Term 2 Surface Water Treatment Rule (LT2), will require 13 water systems that use surface water for their source to install additional treatment to enhance protection against possible waterborne pathogens, after *Cryptosporidium* was found over a certain threshold in their raw water sources. Compliance dates vary based on the water system's population, but all will be challenged with the additional treatment requirements.

And finally, a rule that has been in place since the early 1990's, the Lead and Copper Rule, has been under intense scrutiny nationwide. This scrutiny has caused us here in the Public Drinking Water Branch to thoroughly review our implementation procedures to make sure our water systems are meeting all the rule requirements. As a general statement, our large systems have lime softening plants that add calcium and produce stable water. Our ground water systems, that rely on wells, to supply water draw from aquifers that normally produce very hard water that is not corrosive and is unlikely to leach lead from the distributions system.

Going forward, as you can see above, there are several challenging areas to focus on and we plan to continue to partner with our water systems to make sure Missouri's citizens receive high-quality, abundant and safe drinking water.

I hope you find this report informative and useful.

David J. Lamb, Chief
Public Drinking Water Branch
Missouri Department of Natural Resources

What is a Public Water System?

A public water system is defined as a system that provides water through piping or other constructed conveyances for human consumption to at least 15 service connections, or serves an average of at least 25 people for at least 60 days each year. These are the systems that are the focus of this report.

There are three types of public water systems:

1. Community systems include towns, water districts, subdivisions, mobile home parks and residential facilities such as nursing homes or prisons.
2. Nontransient noncommunity systems serve the same people every day, but not in a residential setting; schools and factories are good examples.
3. Transient noncommunity systems serve different people daily, such as restaurants, resorts and rest stops. These smaller systems are typically in rural areas where it is not feasible to hook up to a city or water district.

Requirements for construction, operation, monitoring, etc., vary among systems based on their type, size and source of water.

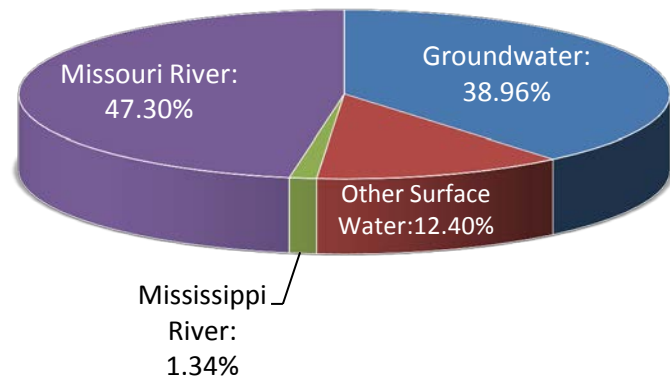
Water testing at systems that are not public water systems (for example, homes served by private wells) is facilitated by county sanitarians and the Missouri Department of Health and Senior Services, rather than the Department of Natural Resources.

The Missouri Public Water System Universe

In 2015, there were 2,732 active public water systems in Missouri. Of this total, 1,427 were community, 216 were nontransient noncommunity, and 1,089 were transient noncommunity systems.

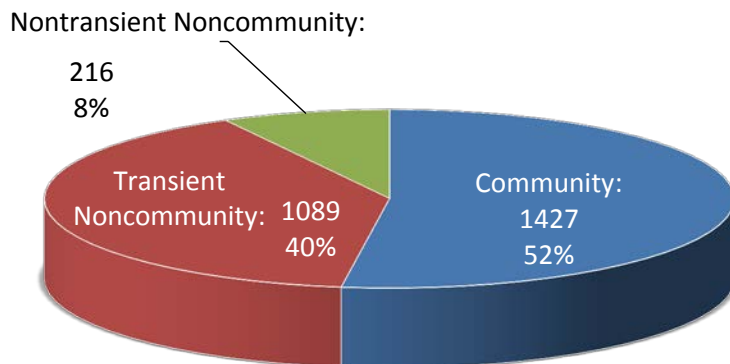
The community water systems in Missouri served more than 5 million citizens in 2015. These citizens benefit from one of Missouri's most outstanding resources: its water.

Source of Water (Percent of Population Served by Public Water Systems)



*Population served by alluvial wells are included in the groundwater percentage

Public Water Systems by Type



There is generally a large quantity of high-quality water in Missouri.

By far the largest source of drinking water for Missourians is surface water from the Missouri River. The abundant supply of water in the Missouri River and its proximity to the state's major population centers make the use of this river as a source so popular.

Groundwater is the next most used source of drinking water for Missouri's community supplies. In southern Missouri, good quality groundwater is easy to obtain and typically requires

little treatment to be used for drinking water. Some groundwater systems have the best of both worlds and use alluvial wells in valleys of the Missouri and Mississippi river system where they can get large volumes of water free of surface contaminants. Wells in the Missouri River alluvium provide groundwater to a significant population. More than half the state's population gets their drinking water from the Missouri River or its alluvial wells. The importance of this resource cannot be overstated.

Analysis of Compliance

We expect a lot from our public water systems and require testing for as many as 91 different regulated chemicals and microbiological contaminants on a regular schedule. A system is to be applauded for performing all required testing and meeting all maximum contaminant levels, also referred to as MCLs, and treatment technique standards. When violations do occur, that often is the first identification of a problem and can be the first step toward correcting it. Many public water systems perform testing beyond what is required by the state.

The Summary of Violations table in this report counts individual violations. Each public water system has the potential to accumulate multiple violations during the year because there are multiple regulations involved and some monitoring is on a monthly schedule. For example, the monitoring requirements for the Total Coliform Rule alone create a potential for more than 30,000 violations. This puts some perspective on the violation figures shown in the Summary of Violations table and the information in the appendices. Another factor to

consider is the number of systems that have violations. Many of the violations are from water systems with problems that result in multiple violations during the year. Other systems may only have one or two violations.

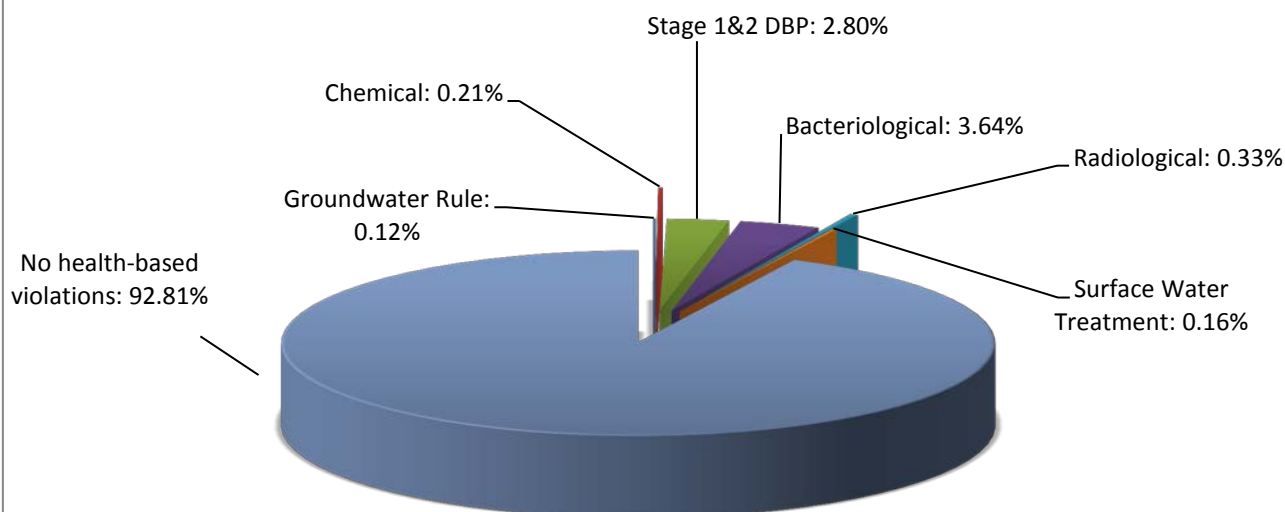
Appendices A through C list specific systems by county. The department uses various methods to focus on the water systems that need attention. The department used a process for many years developed by EPA to identify significant noncompliers. State regulators were critical of this process because it weighted monitoring and reporting violations as much as health-based violations. As a result, EPA developed a new enforcement response policy that focuses on health-based violations. This new policy includes an enforcement targeting tool that tracks systems with the most noncompliance. The new policy and tool identify priority systems for enforcement response, define timely and appropriate enforcement responses and clarify what constitutes a formal action.

Maximum contaminant level and treatment technique violations can compose a significant threat to public

health. These occurred at a small number of public water systems serving approximately 7.19 percent of the population.

Since 1996, when the first Annual Compliance Report was produced, Missouri has served water that meets all health-based standards to 90 percent of the population. In 2007, this compliance measure dropped significantly because Missouri's largest water system had a treatment technique violation. The same phenomenon happened again in 2010. Even though these events were of short duration, the entire population had to be counted in this statistic. For more information on this item, refer to the 2008 or 2011 Annual Compliance Report.

Percent Population of Community Water Systems in Violation of Health-based Standards



EPA and the states have worked together to develop an additional compliance measure called “person-months during which community water systems provide water that meets health-based standards.” This measure is intended to take into account situations where violations are of short duration. Missouri achieved 92.81 percent compliance with this measure in 2015. The national target for federal fiscal year 2015 was 95 percent.

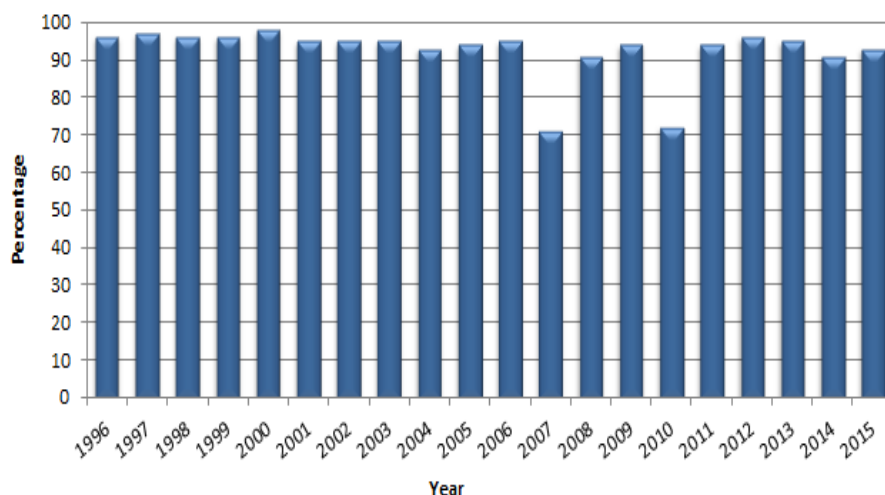
The majority of MCL and monitoring violations in 2015 were for failure to meet the requirements of the Total Coliform Rule. Total coliform bacteria serve as an indicator that disease-causing organisms may be present. All public water systems in the state must test for this type of bacteria every month they dispense water to the public. Monitoring violations are by far the most common violation for this rule. The department is particularly concerned when monitoring violations occur at public water systems that have a history of bacteriological contamination. Adequate testing is the only way to know for sure if the problems have been corrected or have reoccurred.

In 2015, 23 public water systems, 0.84 percent, had acute violations for E. coli. Another way to look at the number of acute MCL violations is to compare the number that actually occurred to the number possible. Since bacteriological testing is required monthly, the 2,732 water systems had more than 30,000 chances to get an E. coli MCL violation. The 23 that actually occurred represent less than one percent of the number possible. While these acute violations can be serious, they are rare.

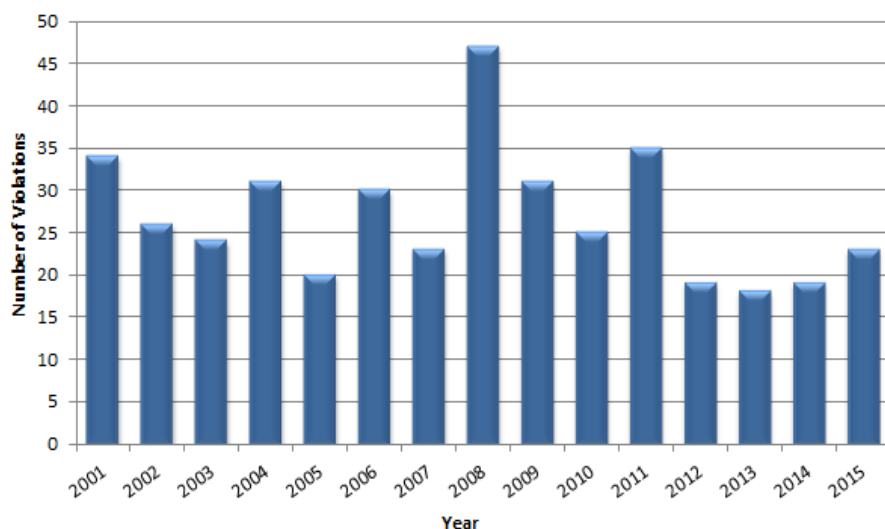
Some people may be more vulnerable to waterborne illness than the general population. To educate the public on this issue, community water systems include a warning in their annual Consumer Confidence Reports stating that some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections.

Consumer Confidence Reports (CCRs) provide detailed information for individual community water systems, while this report does not. Community water systems must distribute the CCR annually to water customers detailing specific information about the water system. This includes information about the source(s) of drinking water and the levels of contaminants in the drinking water. Usually, these contaminants pose no health threat or are below the Maximum Contaminant Level and are not violations. The CCR must list violations of state and federal requirements for the calendar year. The department prepares a CCR for water systems to use and posts it

Drinking Water Trends Community Systems: Population Served Meeting All Health-based Requirements



E. coli Acute MCL Violations



online at <http://dnr.mo.gov/ccr/index.html>, along with additional information about CCRs.

As a result of these efforts, CCR compliance rates increased over the previous year. In 2015, 95.52 percent of Missouri’s community water systems distributed their Consumer Confidence Reports properly.

Anyone can request a copy of their report from their public water system or by calling the department’s Public Drinking Water Branch at 800-361-4827 or 573-526-0135.



Compliance Activities: Preserving the Quality of Drinking Water

The department works closely with violators to return them to compliance in a timely manner. This includes phone contacts, on-site inspections, meetings with owners or operators and technical assistance as needed. For more serious violations, a bilateral compliance agreement between the water system owner and the department is the tool used to return the system back into compliance. Bilateral compliance agreements are voluntary written agreements negotiated between the system owner and department's regional office. This process allows the department to determine the improvements the water system needs to make without either party having to endure the time and cost of formal litigation.

If a water system owner or operator violates a bilateral compliance agreement, the department takes formal enforcement actions. The public water system is referred to the Public Drinking Water Branch for an administrative order on consent. This order includes a compliance schedule and penalties. If this enforcement action is unsuccessful then the Public Drinking Water Branch refers the matter to the attorney general's office for suit and injunctive relief.

Public Drinking Water Branch staff work in conjunction with other agencies to protect public health. By serving on a committee with staff from the Department of Health and Senior Services, the two agencies identify ways to support and benefit each other's activities. One of those areas is assisting facilities, such as restaurants, that are potentially regulated by both agencies.

The department provides training and technical assistance in an effort to prevent the occurrence of violations. Training is routinely provided to operators and owners of public water systems around the state, primarily concentrating on the basic principles of running a water system, performing the required monitoring and preventing contamination of the system. Technical assistance in the form of phone contacts and on-site visits is also available to help water system operators avoid or correct problems. Staff in the department's regional and satellite offices carry out most of these activities.

For all violations, public water systems are required to notify the consumers they serve. The department provides all public water systems with the necessary forms and information to effectively notify the public. The method of notification varies by the violation and system type. Systems must report back to the department how the public notice was performed. Some violations, such as the confirmed detection of E. coli, warrant immediate public notification due to the threat to public health. For such acute violations, the department requires systems to notify customers within 24 hours to boil water before consumption. Boil water orders remain in effect until the problem has been corrected and the water is safe to consume.

For More Information

Information about Missouri's public water systems can be obtained by writing to the Missouri Department of Natural Resources, Water Protection Program, Public Drinking Water Branch, P.O. Box 176, Jefferson City, MO 65102-0176 or calling 800-361-4827 or 573-526-0135. Information is also available at dnr.mo.gov/env/wpp/dw-index.html.



Summary of Violations Table

The following definitions apply to the Summary of Violations table.

Filtered Systems: Water systems that have installed filtration treatment [10 CSR 60-4.050].

Inorganic Contaminants:

Non-carbon based compounds such as metals and nitrates. These contaminants are naturally- occurring in some water, but can get into water through farming, chemical manufacturing and other human activities [10 CSR 60-4.030].

Lead and Copper Rule: Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures [10 CSR 60, Chapter 15]. Violations are reported for: monitoring, public education or corrosion control optimization failure.

Organic Contaminants: Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories [10 CSR 60-4.040 and 4.100].

Radionuclides: Radioactive particles that can occur naturally in water or result from human activity. Safe drinking water regulations set maximum contaminant levels on five types of radionuclides: radium-226, radium-228, uranium, gross alpha and beta particle/photon radioactivity [10 CSR 60-4.060].

Surface Water Treatment Rule: This includes a series of rules promulgated from 1989-2009 that establish criteria under which water systems supplied by surface water sources, or groundwater sources under the direct influence of surface water, must filter and disinfect their water (Surface Water Treatment Rule, Interim Enhanced Surface Water Treatment Rule, Long Term 1 Enhanced Surface Water Treatment Rule, Long Term 2 Enhanced Surface Water Treatment Rule) [10 CSR 60-4.050 and 60-4.052].

Violations of the surface water treatment rules are reported for the following categories:

- **Monitoring, routine/repeat (for filtered systems):** Failure to carry out required tests or to report the results of those tests. A major monitoring violation for the surface water treatment rule occurs when at least 90 percent of the required samples are not taken or results are not reported during the compliance period.
- **Treatment techniques (for filtered systems):** Failure to properly treat the water.
- **Total Coliform Rule:** The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause a short-term health problem. If no samples are collected during the one-month compliance period, a major monitoring violation occurs. States report four categories of violations to EPA:
 1. **Acute MCL violation:** A violation where the system found *E. coli*, potentially harmful bacteria, in its water.
 2. **Non-acute MCL violation:** A violation where the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5 percent of the samples positive for total coliform is a violation.
 3. **Major routine and follow-up monitoring:** A violation where a system did not perform any monitoring.
 4. **Sanitary Survey:** A major monitoring violation if a system fails to collect five routine monthly samples if sanitary survey is not performed.

Maximum Contaminant Level: The highest amount of a contaminant allowed in drinking water. Maximum Contaminant Levels, or MCLs, ensure drinking water does not pose a health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

Monitoring: The department specifies which water testing methods the water systems must use and sets schedules for the frequency of testing. A water system that does not follow the department's schedule or methodology is in violation [10 CSR 60-4.010]. States must report monitoring violations that are significant as determined by the EPA Administrator, in consultation with the department. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period.

Groundwater Rule: Applies to public water systems that serve groundwater. It ensures monitoring of groundwater sources for *E. coli* contamination, and relies on four strategies to address this risk: periodic sanitary surveys, triggered source water monitoring in the case of a positive sample, corrective action for a system found to have a significant deficiency or source water *E. coli* contamination, and compliance monitoring to ensure the treatment technology is reliable.

Treatment Techniques: A water disinfection process that EPA requires instead of a MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also been included in this category of violation for purposes of this report.

Violation: A failure to meet any state or federal drinking water regulation.

Organic Contaminants: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/ Reporting	
	MCL ¹ (mg/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Organic Contaminants				*			
1,1,1-Trichloroethane	0.2					3	1
1,1,2-Trichloroethane	0.005					3	1
1,1-Dichloroethylene	0.007					3	1
1,2,4-Trichlorobenzene	0.07					3	1
1,2-DCBP	0.0002						
1,2-Dichloroethane	0.005					3	1
1,2-Dichloropropane	0.005					3	1
2,3,7,8-TCDD (Dioxin)	3x10-8						
2,4,5-TP	0.05					0	0
2,4-D	0.07					0	0
Acrylamide							
Alachlor	0.002						
Aldicarb	0.003					0	0
Aldicarb Sulfone	0.002					0	0
Aldicarb Sufoxide	0.004					0	0
Atrazine	0.003					0	0
Benzene	0.005					3	1
Benzo[a]pyrene	0.0002						
BHC Gamma	0.0002					0	0
Carbofuran	0.04					0	0
Carbon tetrachloride	0.005					3	1
Chlorobenzene	0.1					3	1
Chlordane	0.002					0	0
cis-1,2-Dichloroethylene	0.07					3	1
Dalapon	0.2					0	0
Di(2-ethylhexyl)adipate	0.4						
Di(2-ethylhexyl)phthalate	0.006						
Dichloromethane	0.005					3	1
Dinoseb	0.007					0	0
Diquat	0.02						
Endothall	0.1						
Endrin	0.002					0	0
Epichlorohydrin							
Ethylbenzene	0.7					3	1
Ethylene dibromide	0.00005						
Glyphosate	0.7						
Heptachlor	0.0004					0	0

¹ Values are in milligrams per liter (mg/L), unless otherwise specified

*Shaded areas indicate a violation is not applicable in this category

Organic Contaminants: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/ Reporting	
	MCL ¹ (mg/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Heptachlor epoxide	0.0002					0	0
Hexachlorobenzene	0.05						
Hexachlorobenzene	0.001					0	0
Hexachlorocyclopentadiene	0.05					0	0
Lasso	0.05					0	0
Lindane	0.0002						
Methoxychlor	0.04					0	0
Monochlorobenzene	0.1						
o-Dichlorobenzene	0.6					3	1
Oxamyl (Vydate)	0.2					0	0
Para-Dichlorobenzene	0.075					3	1
Pentachlorophenol	0.001					0	0
Picloram	0.5					0	0
Simazine	0.004					0	0
Styrene	0.1					3	1
Tetrachloroethylene	0.005					3	1
Toluene	1					3	1
Total PCB	0.0005						
Toxaphene	0.003					0	0
Trans-1,2-Dichloroethylene	0.1					3	1
Trichloroethylene	0.005					3	1
Vinyl chloride	0.002					3	1
Xylenes (total)	10					3	1

¹ Values are in milligrams per liter (mg/L), unless otherwise specified

Disinfection Byproducts Rule: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Techniques		Significant Monitoring/ Reporting	
	MCL ¹ (mg/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Total trihalomethanes	0.80	91	49			15	13
Haloacetic acids	0.60	14	9			15	13
Disinfection byproducts		105	51	0	0	15	13
Total Organic Compounds				1	1		
Insufficient or Non-certified Operator				0	0		

Inorganic Contaminants: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL (mg/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Inorganic Contaminants							
Antimony	0.006					0	0
Arsenic	0.010					0	0
Asbestos	7 million fibers/L						
Barium	2					0	0
Beryllium	0.004					0	0
Cadmium	0.005					0	0
Chromium	0.1					0	0
Cyanide (as free cyanide)	0.2					0	0
Fluoride	4.0	6	2			6	2
Mercury	0.002					0	0
Nitrate	10 (as nitrogen)					30	30
Nitrite	1 (as nitrogen)						
Selenium	0.05					0	0
Thallium	0.002					0	0
Total nitrate and nitrite	10 (as nitrogen)					0	0

Radiological Contaminants: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL ¹ (pCi/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Radiological Contaminants							
Gross Alpha	15pCi/L	33	12			7	4
Radium-226 and radium-228	5 pCi/L	20	9			7	4
Gross beta	4 mrem/yr						
Subtotal		53	21			14	4

Microbiological Contaminants: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL Presence/Absence	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Total Coliform Rule							
Acute MCL violation	Presence	23	21				
Non-acute MCL violation	Presence	462	319				
Major routine and follow up						564	341
Sanitary survey ³							
Subtotal		462	319			564	341

¹ Values are in Picocuries per liter (pCi/L), unless otherwise specified

² Some systems may have violations in multiple categories

³ Number of violations for failure to perform sanitary survey under the Total Coliform Rule.

⁴ All Systems with an acute MCL violation also had a non-acute monthly MCL violation for the same month

Surface Water Treatment Rule: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL ¹ (pCi/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Surface Water Treatment							
Filtered systems							
Monitoring, routine/repeat						0	0
Treatment techniques				10	3		
Unfiltered systems							
Monitoring, routine/repeat							
Failure to filter							
Subtotal				10	3	0	0

Lead and Copper Rule: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL ¹ (pCi/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Lead and Copper Rule ¹							
Initial lead and copper tap monitoring and reporting						6	6
Follow-up or routine lead and copper tap monitoring and reporting						15	15
Treatment installation							
Public education						8	8
Subtotal						29	29

¹ Includes any system not up to date on lead and copper monitoring. Not comparable with Annual Compliance Report figures from 2014

Public Notification: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Techniques		Significant Monitoring/Reporting	
	MCL ¹ (pCi/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Public Notification						443	267
Consumer Confidence Reports ¹						64	64
Subtotal						507	267

¹ Violations for failure to produce and distribute the 2014 Consumer Confidence Report in 2015

Groundwater Rule: Jan. 1, 2015 - Dec. 31, 2015

		MCL		Treatment Technique		Significant Monitoring/Reporting	
	MCL ¹ (pCi/L)	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations	No. of Violations	No. of Systems with Violations
Groundwater Rule							
Failure to treat				5	4		
Failure to address contamination				0	0		
Failure to address deficiency				24	24		
Public Notice						54	42
Sanitary Survey						0	0
Major routine and follow up monitoring						88	50
Subtotal				29	28	142	74

I. Coliform MCL Violations

A. Acute

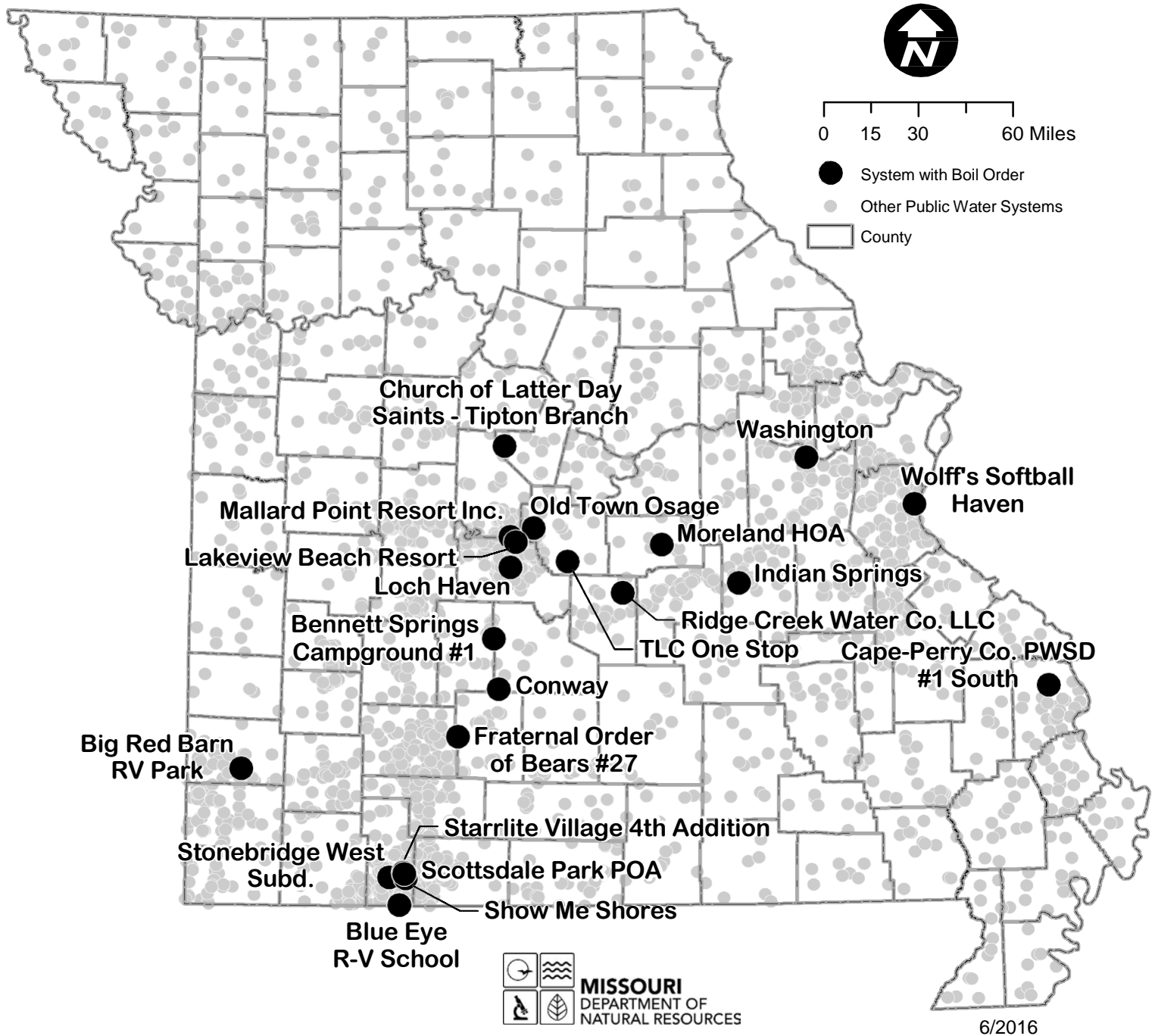
The following systems were under boil water orders due to acute MCL violations for fecal coliform or E. coli bacteria for the months listed. These acute violations also violate the standard for total coliform bacteria.

County	ID#	System Name	Month(s)	Issue	Rescind
CAMDEN	MO3191521	LAKEVIEW BEACH RESORT	June	6/12/2015	6/26/2015
	MO5031413	LOCH HAVEN	August	8/10/2015	8/19/2015
	MO3192143	MALLARD POINT RESORT INC	June	6/15/2015	6/19/2015
CAPE GIRARDEAU	MO4024096	CAPE PERRY CO PWSD 1 SOUTH	May	5/20/2015	5/23/2015
CRAWFORD	MO6192136	INDIAN SPRINGS	June	7/1/2015	7/20/2015
FRANKLIN	MO6010838	WASHINGTON	July	7/16/2015	7/22/2015
JASPER	MO5242916	BIG RED BARN RV PARK	December	12/19/2015	3/4/2016
JEFFERSON	MO6203139	WOLFFS SOFTBALL HAVEN	June	6/18/2015	6/29/2015
	MO6203139	WOLFFS SOFTBALL HAVEN	June	7/3/2015	
LACLEDE	MO5240034	BENNETT SPRINGS CAMPGROUND 1	June	6/11/2015	7/7/2015
	MO5010185	CONWAY	November	12/3/2015	12/9/2015
MARIES	MO3191371	MORELAND HOMEOWNERS ASSOCIATION	June	6/19/2015	7/13/2015
MILLER	MO5212967	OLD TOWN OSAGE	May	5/29/2015	6/19/2015
	MO3211085	TLC ONE STOP	May	6/3/2015	6/5/2015
MONITEAU	MO2273113	CHURCH OF LATTER DAY SAINTS TIPTON BRANCH	July	7/13/2015	7/16/2015
PULASKI	MO4031631	RIDGE CREEK WATER COMPANY LLC	November	11/25/2015	12/14/2015
STONE	MO5171914	BLUE EYE R V SCHOOL	May	6/3/2015	6/5/2015
	MO5036353	SCOTTSDALE PARK PROPERTY OWNERS ASSN	July	7/27/2015	8/3/2015
	MO5262776	SHOW ME SHORES	May	5/22/2015	6/10/2015
	MO5258070	STARRLITE VILLAGE 4TH ADDITION	May	5/18/2015	5/29/2015
	MO5036201	STONEBRIDGE WEST SUBD	May	6/1/2015	6/22/2015
WEBSTER	MO5213087	FRATERNAL ORDER OF BEARS # 27	March	3/20/2015	5/1/2015
	MO5213087	FRATERNAL ORDER OF BEARS # 27	June	7/13/2015	4/5/2016

Note: If no "Rescind Date", the boil order was still in effect at time of printing.

2015 Boil Water Orders

Issued due to acute MCL violations and the Total Coliform Rule and the Surface Water Treatment Rule



For current boil water orders, check the department's web page at www.dnr.mo.gov/env/wpp/boil/index.html

Appendix A - MCL Violations Non-Acute

I. Coliform MCL Violations

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
BARRY	MO5021116	SOUTHWEST RURAL WATER DISTRICT 1	November
	MO5031354	WOOD HAVEN SUBDIVISION	June, July
	MO5036195	TWIN RIVERS SUBDIVISION	July
	MO5071342	OZARK VILLA AT SHELL KNOB	August
	MO5211851	OFFICE PUB & STEAKHOUSE	August
	MO5212841	FRATERNAL ORDER OF EAGLE 4155	September
	MO5213150	NONNAS NUMMIES	July
	MO5243077	PARADISE VALLEY CAMPING CLUB	May
	MO5252337	MAYO BEACH SUBDIVISION	February
	MO5252497	EAGLE POINT ESTATES POA	May
	MO5258287	VIOLA R V & MOBILE HOME PARK	July
	MO5261623	COUNTRY VILLAGE MHP	March, April, August, September
	MO5283094	DOLLAR GENERAL #4022	September
	MO5283142	DOLLAR GENERAL #15781	March, May, July
	MO5291277	RAPID ROBERTS 106	May, June
BENTON	MO1041483	OUR SLICE OF PARADISE	November
	MO1272844	ABUNDANT LIFE CHRISTIAN CHURCH	June
	MO3010469	LINCOLN	December
	MO3031366	THE MISSING WELL	August
	MO3036072	LAKEVIEW HEIGHTS WATER ASSOC INC	January
	MO3036133	POM OSA HEIGHT SUBDIVISION	August
	MO3041361	COUNTRY ACRES MOBILE HOME PARK	November, December
	MO3112192	USACE TRUMAN LONG SHOAL PUA	May, June
	MO3142486	LOST VALLEY HATCHERY	June, July
	MO3190082	KOLBS LAKESIDE RESORT LLC	August
	MO3190902	HEAD WATERS MOTEL	June
	MO3210269	BENTON HOUSE	December
	MO3210326	HILLTOP BAR B Q	September
	MO3241430	EAGLES NEST RV RESORT	June, October
	MO3241706	ANGLERS CAMP	October
	MO3281109	AMERICAN LEGION POST 217	July
BOLLINGER	MO4010483	MARBLE HILL SOUTH	September
	MO4010496	MARBLE HILL NORTH	September
	MO4243043	CASTOR RIVER PARK	January
BOONE	MO3036153	KUHLE H20	September
BUTLER	MO4191461	MILLERS MOTOR LODGE	January, February, April, May, June
CALLAWAY	MO3048994	NEW CHRISTIAN LIFE FELLOWSHIP	May, September
CAMDEN	MO3024090	CAMDEN CO PWSD 1	April
	MO3031091	GREENVIEW BAY SUBD	April
	MO3031208	MAKALU ESTATES	May, July
	MO3031299	GOLDEN GLADE WATER SYSTEM	February
	MO3071339	TT SEWER	August
	MO3190763	IRISH HILLS RESORT	June

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
CAMDEN	MO3191521	LAKEVIEW BEACH RESORT	June
	MO3192143	MALLARD POINT RESORT INC	June
	MO3198088	MICKEYLAND RESORT	February
	MO3212445	MARINERS PIER 31 YACHT CLUB	August
	MO3212581	BULLDOGS BEACHHOUSE	July
	MO3248239	CAMP HERITAGE	June
	MO3260059	DEER VALLEY PARK	May, September
	MO3281045	NEW TRIBES MISSION INC	February, April
	MO5031413	LOCH HAVEN	August
	MO5031429	PLEASANT VALLEY ASSOCIATION 1	November, December
	MO5031533	GREEN ACRES MOBILE HOME PARK	June, December
	MO5031544	OAK SHADOWS SUBDIVISION	March, April
	MO5212774	OH TOMMYS PUB & GRILL	July
	MO5212785	MUDBUGS BAR AND GRILL	October
	MO5252715	WINDWOOD SHORES	August
	MO5253022	MAPLE HILL SUBDIVISION	July
	MO5253086	SPORTSMAN LODGE SUBDIVISION NO 2	April, August
	MO5301394	GARDEN GATE ESTATES	June
	MO5301407	ROYALE PALMS	August
CAPE GIRARDEAU	MO4024096	CAPE PERRY CO PWSD 1 SOUTH	February, May
	MO4031453	WESTLAKE MEADOWS SUBDIVISION	August
	MO4079503	MID AMERICA TEEN CHALLENGE	July
CASS	MO1010225	DREXEL	September
	MO1024117	CASS CO PWSD 5	September
CEDAR	MO5212752	ORLEANS TRAIL RESTAURANT	July, August
	MO5282846	AMERICAN VETERANS POST 116	July, August, September, October, November
CHARITON	MO2010420	KEYTESVILLE	November
CHRISTIAN	MO5010071	BILLINGS	October, November
	MO5036305	PIPPINVILLE & OAK PARK OWNERS ASSN	October, November
	MO5048394	SOUTH OAKS MHP	July
	MO5150675	DELMINA WOODS	August
	MO5171596	SPOKANE R VII SCHOOLS	June
COLE	MO3212564	STEVES FAMILY STYLE RESTAURANT	July, August
COOPER	MO3010115	BUNCETON	August, October
CRAWFORD	MO4242910	LUCKY CLOVER RIVER RESORT INC	June, July
	MO6010092	BOURBON	May, July
	MO6010200	CUBA	July, October
	MO6010759	STEELVILLE	June
	MO6190792	FOX SPRINGS LODGE	July
	MO6190795	BIRDS NEST LODGE	August
	MO6192136	INDIAN SPRINGS	June
	MO5010807	URBANA	July
DALLAS	MO5033116	RIDGEVIEW ESTATES	August
	MO5041253	MERITTS CAMPGROUND	June

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
DALLAS	MO5210911	SAND SPRING RESORT & CANOE LLC	July
	MO5242820	WILD OAKS CAMPGROUND	June
	MO5282882	FRATERNAL ORDER OF THE BEARS # 99	August
	MO5283122	HOSTETLER FEED & FARM SUPPLY	November, December
	MO5292380	D DIAMOND TRAVEL PLAZA	April, May, June, July
DAVIESS	MO1024186	DAVIESS CO PWSD 1	June
DENT	MO4010721	SALEM	December
	MO4283064	VIRGINIA VAUGHAN RENTALS	June
DOUGLAS	MO5010040	AVA	September
	MO5171804	MT ZION BIBLE SCHOOL	June, December
	MO5241141	TWIN BRIDGES CANOE AND CAMPGROUND	July, September
DUNKLIN	MO4010022	ARBYRD	July
	MO4010170	CLARKTON	April
	MO4010370	HOLCOMB	August
FRANKLIN	MO6010708	ST CLAIR	July, August, October
	MO6010801	UNION	June, July
	MO6010838	WASHINGTON	May, June, July
	MO6024211	FRANKLIN CO PWSD 1	January
	MO6036219	BEAUTY VIEW ACRES SUBDIVISION	July
	MO6036269	WOODLAND HILLS SUBDIVISION	October, November
	MO6283011	NAT ASSOC INTERCULTURAL FAM MISSION INC	October
GASCONADE	MO3191470	LOST VALLEY LAKE RESORT	December
	MO6036015	PEACEFUL VALLEY SERVICE CO	June
	MO6213155	TURNPIKE WATER	October
GREENE	MO5010032	ASH GROVE	September, December
	MO5036094	GREENE HILLS COUNTRY CLUB	November
	MO5036109	WADSWORTH PARK UNIT 4 AND 5	December
	MO5036258	EASTBOUROUGH SUBDIVISION	June
	MO5188035	CONCO QUARRIES	December
	MO5188304	JOHN TWITTY ENERGY CENTER	April
	MO5210110	SPRINGFIELD SKATELAND	June
	MO5212683	VIRGILS BAR & SELF STORAGE	September
	MO5258076	BOLTONS GENERAL STORE	September
	MO5291060	BULLSEYE 37	July, August
HENRY	MO1010865	WINDSOR	July
	MO1031542	OAKWOOD WATER ASSOCIATION	November
HICKORY	MO5031456	LINDLEY COVE WELL ASSOCIATION	June, July
	MO5218044	POMME DE TERRES SHADOW LAKE GOLF COURSE	September, December
	MO5238302	FUGATE MOBILE HOME PARK	June, July, August, September
	MO5251418	REMINGTON RANGE	October
	MO5252631	CAPRI ESTATES	July, December
	MO5252773	STARLIGHT LANE SUBDIVISION	March
	MO5283019	PRAIRIE CHAPEL UMC	May
HOLT	MO1010191	CRAIG	July

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
HOWELL	MO4282521	LIGHTNING BOWL	October, December
IRON	MO4069040	BELLEVUE VALLEY NURSING HOME	April
	MO4171180	BELLEVUE ELEM SCHOOL	November
JACKSON	MO1010320	GRAIN VALLEY	July
	MO1024278	JACKSON CO PWSD 12	July
	MO1024279	JACKSON CO PWSD 13	July
JASPER	MO5031602	MALFUNCTION JUNCTION	June, July
	MO5041599	PLEASANT VALLEY MHP	November
	MO5172883	NEW COVENANT CHURCH	May, July
	MO5180607	DYNO NOBEL	January, December
	MO5182965	GENERAL DYNAMICS	September, October
	MO5202945	COACHLIGHT RV PARK	June
	MO5242916	BIG RED BARN RV PARK	December
	MO5292802	KUM & GO 29	October
JEFFERSON	MO6048148	MACKENZIE RIDGE LLC	July
	MO6171881	SUNNYHILL ADVENTURES	June
	MO6180934	RIVER CEMENT COMPANY	July, November
	MO6182217	AMEREN U E RUSH ISLAND	July, August
	MO6203084	JEFFERSON CO PARKS DEPT SPORTS COMPLEX	August
	MO6203139	WOLFFS SOFTBALL HAVEN	June, September
	MO6292691	PRO STOP	December
LACLEDE	MO5010185	CONWAY	November
	MO5240034	BENNETT SPRINGS CAMPGROUND 1	June
LAFAYETTE	MO1024326	LAF/JO/SALINE CO CONS PWSD 2	September
	MO1041187	I 70 MOBILE CITY MHP	June
LAWRENCE	MO5041314	YOUNGBERG ESTATES MHP	September
	MO5211348	DONS CROSSROADS	November
	MO5292369	MASSIES SUPER STOP	June
LINCOLN	MO6031217	TIMBER RIDGE ESTATES	October
	MO6031357	FAWN LAKES	April
	MO6048290	LINDEMANN MHP	May
	MO6170733	ST ALPHONSUS SCHOOL	May, June
MCDONALD	MO5041094	ELK O VUE RIVER PARK MHP	August, December
	MO5211225	T & R SOUTHWESTERN CAFE	October
	MO5240236	SHADY BEACH CAMPGROUND	April
	MO5272964	VICTORY ROAD CHURCH	September
MILLER	MO3031381	OAK HILL FOREST SUBDIVISION	July
	MO3048097	DOOLITTLE MHP	June
	MO3211085	TLC ONE STOP	May
	MO3212296	TOOTERS SALOON & STEAKHOUSE	May
	MO5212967	OLD TOWN OSAGE	April, May
	MO5283144	OSAGE RIVER FARM INC	May, June, August
MONITEAU	MO2273113	CHURCH OF LATTER DAY SAINTS TIPTON BRANCH	July
	MO3010791	TIPTON	May
	MO3024395	MONITEAU CO PWSD 1	October

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
MONITEAU	MO3024396	MONITEAU CO PWSD 2	July
MONTGOMERY	MO3011121	RHINELAND	January, May, June
	MO6282894	LOUTRE MARKET	May
MORGAN	MO3010047	BARNETT	July, August, September, October
	MO3031358	MORGAN CO PWSD # 2	February, November, December
	MO3212560	LAKE HOUSE CAFE	April
	MO3240046	WONDERLAND CAMP	April, September
	MO3252169	LUCKY POINT	November
	MO3262592	OXFORD PEACEFUL VALLEY RESORT	June
	MO5031436	10 4 WATER SYSTEM	June, August
	MO5192693	AQUA VITAE ESTATES	July
	MO5243147	BEACHWOODS CAMPGROUND	June
	MO5252990	WASHBURN POINT SUBDIVISION	June
	MO5293171	CUP TREE OSS	December
	MO5301457	MILLSTONE LUXURY CONDOMINIUMS	August, September
NEW MADRID	MO4024419	NEW MADRID CO PWSD 5	April
NEWTON	MO5010267	FAIRVIEW	June, August
	MO5033107	SHADY LANE SUBDIVISION	July, September
	MO5041190	IRIS PARK MHP	March
	MO5211212	NANSYS MEXICAN RESTAURANT	May
	MO5211719	HWY 59 CAFE	October
	MO5241734	KOA CAMPGROUND	September
	MO5258147	86 SUPER STOP LLC	July, September
	MO5272988	SILVER MOON FULL GOSPEL CHURCH	April, May
	MO5292861	GET N SPLIT	July
NODAWAY	MO1024428	NODAWAY CO PWSD 1	October
OREGON	MO4010012	ALTON	April, June, July
	MO4024432	OREGON CO PWSD 1	April, June, July
	MO4100065	USFS GREER CROSSING	August
OSAGE	MO2041594	LINN ACRES	March
	MO2172928	CREATIVE KIDS LEARNING CENTER	April, June
OZARK	MO5011066	BAKERSFIELD	June, July, October, November
	MO5190867	TWIN FORKS RESORT	September
	MO5240536	DAWT MILL AND CAMPGROUND	April
	MO5242741	RIVERSIDE CANOE RENTAL	May
PERRY	MO4036202	LAKE KAH TAN DA ESTATES INC	May
	MO4181392	BUCHHEIT INC	March
PETTIS	MO1272873	CAMP BRANCH BAPTIST CHURCH	April
	MO3010386	HUGHESVILLE	July
PHELPS	MO3024465	PHELPS CO PWSD 1	September
	MO3100011	USFS LANE SPRING RECREATION AREA	May, June
PLATTE	MO1243138	BEAN LAKE RV PARK	April, May, June
POLK	MO5031408	BOLIVAR SOUTHTOWN UTILITIES COMPANY INC	July
	MO5031606	SUNSHINE ESTATES	August
	MO5032924	TURTLECREEK SUBDIVISION	January, March

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
POLK	MO5048754	LAKE MEADOWS MHP	November
	MO5193115	RED CEDAR MOTEL AND RV PARK	June
PULASKI	MO3010219	DIXON	May, August, November, December
	MO3010720	ST ROBERT	June
	MO3010841	WAYNESVILLE	July
PULASKI	MO3024491	PULASKI CO PWSD 2	June, August
	MO4031626	MC COUCH DRIVE HOA	May
	MO4031631	RIDGE CREEK WATER COMPANY LLC	October, November, December
REYNOLDS	MO4190139	TWIN RIVERS LANDING OUTFITTERS LLC	July
	MO4243133	LOGAN VALLEY CHRISTIAN RETREAT	June, July
	MO4293001	CENTERVILLE QUICK STOP LLC	November, December
RIPLEY	MO4024522	RIPLEY CO PWSD 1 WEST	July
	MO4100025	USFS DEER LEAP CAMPGROUND	September
SCHUYLER	MO2010224	DOWNING	October
SCOTT	MO4010062	BENTON	September
	MO4010971	HAYWOOD CITY	November, December
	MO4021566	SCOTT CO PWSD 4	July
	MO4173024	ST LAWRENCE PARISH PROPERTIES	June, July
SHANNON	MO4142876	TWIN PINES CONSERVATION EDUCATION FACILITY	January
ST CHARLES	MO6030662	BIG COUNTRY ACRES SUBDIVISION	July
	MO6163066	TOWNE PARK	July
	MO6213175	WINE COUNTRY GARDENS	November
	MO6240106	CHEROKEE LAKES CAMP	June
ST CLAIR	MO6282901	CHANDLER HILL VINEYARD	November
	MO5010480	LOWRY CITY	October, November
	MO4010073	BISMARCK	October
ST FRANCOIS	MO4010270	FARMINGTON	May, August, September, October, November
	MO4170524	NANAS BRICK OVEN	June
	MO4172969	HARVEST CHRISTIAN CENTER	May
	MO4173134	MRS THRASHERS ADVANCED LEARNING CENTER	August, September
ST LOUIS	MO4202962	ST FRANCOIS COUNTRY CLUB INC	July, August
	MO6202395	LONE ELK COUNTY PARK	July
	MO6291618	WILDHORSE CREEK AMOCO	April
STE GENEVIEVE	MO4212833	CROWN RIDGE RESTAURANT	November
	MO4282793	CROWN VALLEY WINERY	November
	MO4283124	CROWN VALLEY MICRO BREWERY	November
STODDARD	MO4024583	STODDARD CO PWSD 3	October
	MO4203026	HWY 60 RV PARK	September
STONE	MO5010192	CRANE	May
	MO5030473	STARLIGHT VILLAGE	August
	MO5030870	COUNTRY TIME ESTATES	September
	MO5031120	SECURITY ACRES	May
	MO5031235	EDGEWATER VILLAGE	December

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
STONE	MO5031353	FOREST GLEN/QUAIL RIDGE SUBDIVISION	November
	MO5036076	HOOT OWL POINT SUBDIVISION	September
	MO5036201	STONEBRIDGE WEST SUBDIVISION	May, September, October
	MO5036205	VILLAGE OF MC CORD BEND	October
	MO5036353	SCOTTSDALE PARK PROPERTY OWNERS ASSN	July
	MO5043117	WARRENS OAKLAND PARK	January, September, October, November, December
	MO5048047	HORIZON MHP	November
	MO5171914	BLUE EYE R V SCHOOL	May
	MO5190611	DEER RUN STORE	March
	MO5190983	BRIDGEPORT RESORT	August, September
	MO5191312	CALM WATERS RESORT	August, September
	MO5213119	LEONAS DELI	June, October
	MO5243075	TABLE ROCK SHORES CAMPGROUND	May
	MO5243120	FUN IN THE SON MINISTRIES INC	April, May, June, November
	MO5251628	GRANDVIEW ACRES SUBDIVISION	September
	MO5252629	ANGLERS BEND SUB REES 1ST ADDITION	September
	MO5258070	STARRLITE VILLAGE 4TH ADDITION	May, July
	MO5262776	SHOW ME SHORES	May
	MO5283073	COX HEALTH	November
TANEY	MO5031621	GREEN ACRES HOMEOWNERS ASSOC	January, April, September, October, November, December
	MO5036180	TANEY CO WATER LLC - VENICE	September
	MO5070683	DEER RUN APTS	July, August
	MO5191022	COOPER CREEK RESORT	August
	MO5240145	CLEVINGER BRANCH MEMBERS CORP	May, June, November
	MO5292590	GATEWAY TO BRANSON EXPRESS STOP	March
	MO5301550	BRIARWOOD & REDBUD SHORES WATER ASSOC	May
WARREN	MO6213062	CEDAR LAKE CELLARS	June
WASHINGTON	MO4173065	LITTLE LEARNERS ACADEMY	June
	MO4180243	BUCKMAN NORTH AMERICA CADET PLANT	June, July
	MO4218505	STARLITE DRIVE IN THEATRE	June, July
	MO4283114	HOT SHOTS	November
	MO6010659	POTOSI	September, December
	MO6024633	WASHINGTON CO PWSD 1	April
	MO6069096	POTOSI EAST	January, September
	MO6180585	REED LUMBER COMPANY LLC	April
	MO4211563	JANAS AT THE LAKE	September
	MO5010283	FORDLAND	September, October, November
WEBSTER	MO5010503	MARSHFIELD	August, October
	MO5069035	OZARK CORRECTIONAL CENTER	October
	MO5130529	MODOT I 44 REST AREA CONWAY	July
	MO5183137	UNDERCOVER TRUCK BED COVERS	May
	MO5192893	PARADISE IN THE WOODS RV PARK	May

I. Coliform MCL Violations (continued)

The following systems had two or more samples test positive for total coliform bacteria in the months indicated. The positive samples were then tested for fecal coliform or E. coli and were found to be negative.

County	ID#	System Name	Month(s)
WEBSTER	MO5213087	FRATERNAL ORDER OF BEARS # 27	March, June
WRIGHT	MO5171242	MANES R V ELEM SCHOOL	June
	MO5183025	BAKER CREEK HEIRLOOM SEED CO	July

II. Chemical MCL Violations

County	ID#	System Name	Chemical
ANDREW	MO1010277	FILLMORE	TOTAL TRIHALOMETHANE (TTHM))
	MO1010757	ROSENDALE	TOTAL TRIHALOMETHANE (TTHM))
	MO1024006	ANDREW CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
	MO1024007	ANDREW CO PWSD 4	TOTAL TRIHALOMETHANE (TTHM))
AUDRAIN	MO2010812	VANDALIA	TOTAL HALOACETIC ACIDS (HAA5)
			TOTAL TRIHALOMETHANE (TTHM))
BARTON	MO5010446	LAMAR	TOTAL TRIHALOMETHANE (TTHM))
BATES	MO1010001	ADRIAN	TOTAL TRIHALOMETHANE (TTHM))
	MO1021160	BATES CO PWSD 7	TOTAL TRIHALOMETHANE (TTHM))
	MO1024034	BATES CO PWSD 5	TOTAL TRIHALOMETHANE (TTHM))
	MO1024035	BATES CO PWSD 6	TOTAL TRIHALOMETHANE (TTHM))
BUTLER	MO4010656	POPLAR BLUFF	TOTAL HALOACETIC ACIDS (HAA5)
CALDWELL	MO1024079	CALDWELL CO PWSD 2	TOTAL TRIHALOMETHANE (TTHM))
CASS	MO1010024	ARCHIE	TOTAL TRIHALOMETHANE (TTHM))
	MO1010301	GARDEN CITY	TOTAL TRIHALOMETHANE (TTHM))
CHARITON	MO2010722	SALISBURY	TOTAL TRIHALOMETHANE (TTHM))
CLINTON	MO1024155	CLINTON CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
COOPER	MO3010089	BOONVILLE	TOTAL TRIHALOMETHANE (TTHM))
	MO3024170	COOPER CO CONSOLIDATED PWSD # 1	TOTAL TRIHALOMETHANE (TTHM))
GENTRY	MO1010755	STANBERRY	TOTAL HALOACETIC ACIDS (HAA5)
	MO1021221	GENTRY CO PWSD 2	TOTAL HALOACETIC ACIDS (HAA5)
			TOTAL TRIHALOMETHANE (TTHM))
GRUNDY	MO2010452	LAREDO	TOTAL TRIHALOMETHANE (TTHM))
	MO2010753	SPICKARD	TOTAL TRIHALOMETHANE (TTHM))
	MO2024237	GRUNDY CO PWSD 1	TOTAL TRIHALOMETHANE (TTHM))
HENRY	MO1010123	CALHOUN	TOTAL TRIHALOMETHANE (TTHM))
	MO1021117	HENRY CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
	MO1021175	HENRY CO PWSD 4	TOTAL TRIHALOMETHANE (TTHM))
	MO1024247	HARRY S TRUMAN PWSD 2	TOTAL HALOACETIC ACIDS (HAA5)
			TOTAL TRIHALOMETHANE (TTHM))
HOWARD	MO2010271	FAYETTE	TOTAL TRIHALOMETHANE (TTHM))
	MO2010566	NEW FRANKLIN	TOTAL TRIHALOMETHANE (TTHM))
JACKSON	MO1010921	UNITY VILLAGE	TOTAL TRIHALOMETHANE (TTHM))
LEWIS	MO2010134	CANTON	TOTAL TRIHALOMETHANE (TTHM))
LINCOLN	MO6024340	LINCOLN CO PWSD 1	FLUORIDE
	MO6031217	TIMBER RIDGE ESTATES	FLUORIDE
LINN	MO2024128	CHARITON LINN CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
LIVINGSTON	MO2024350	LINN LIVINGSTON CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
MADISON	MO4010290	FREDERICKTOWN	TOTAL HALOACETIC ACIDS (HAA5)
			TOTAL TRIHALOMETHANE (TTHM))
MARION	MO2010344	HANNIBAL	TOTAL TRIHALOMETHANE (TTHM))
MERCER	MO2024382	MERCER CO PWSD 1	TOTAL TRIHALOMETHANE (TTHM))
NODAWAY	MO1010627	PARNELL	TOTAL TRIHALOMETHANE (TTHM))
PERRY	MO4024456	PERRY CO PWSD 2	TOTAL TRIHALOMETHANE (TTHM))

II. Chemical MCL Violations (continued)

County	ID#	System Name	Chemical
PETTIS	MO3021332	PETTIS/JOHNSON/SALINE PWSD 1	TOTAL TRIHALOMETHANE (TTHM))
PIKE	MO2010479	LOUISIANA	TOTAL HALOACETIC ACIDS (HAA5) TOTAL TRIHALOMETHANE (TTHM))
PLATTE	MO1024477	PLATTE CO PWSD 3	TOTAL TRIHALOMETHANE (TTHM))
	MO1024482	PLATTE CO PWSD 8	TOTAL TRIHALOMETHANE (TTHM))
PUTNAM	MO2010804	UNIONVILLE	TOTAL HALOACETIC ACIDS (HAA5) TOTAL TRIHALOMETHANE (TTHM))
	MO2024495	PUTNAM CO PWSD 1	TOTAL TRIHALOMETHANE (TTHM))
	MO2036165	LAKE THUNDERHEAD	TOTAL HALOACETIC ACIDS (HAA5) TOTAL TRIHALOMETHANE (TTHM))
RANDOLPH	MO2010362	HIGBEE	TOTAL TRIHALOMETHANE (TTHM))
	MO2010533	MOBERLY	TOTAL TRIHALOMETHANE (TTHM))
SALINE	MO2010502	MARSHALL	TOTAL TRIHALOMETHANE (TTHM))
	MO2024556	SALINE CO PWSD 2	TOTAL TRIHALOMETHANE (TTHM))
SHELBY	MO2010165	CLARENCE	TOTAL TRIHALOMETHANE (TTHM))
ST CLAIR	MO5010020	APPLETON CITY	TOTAL TRIHALOMETHANE (TTHM))

III. Radiological MCL Violations

County	ID#	System Name	Chemical
CAMDEN	MO3031265	BIG ISLAND WATER COMPANY	GROSS ALPHA, EXCL. RADON & U
CAPE GIRARDEAU	MO4021532	CAPE GIRARDEAU CO PWSD 5	GROSS ALPHA, EXCL. RADON & U
	MO4031453	WESTLAKE MEADOWS SUBDIVISION	COMBINED RADIUM (-226 & -228)
LINCOLN	MO6010902	SILEX	GROSS ALPHA, EXCL. RADON & U
	MO6031193	TARA VALLEY WATER ASSN	COMBINED RADIUM (-226 & -228)
			GROSS ALPHA, EXCL. RADON & U
MCDONALD	MO5010449	LANAGAN	COMBINED RADIUM (-226 & -228)
			GROSS ALPHA, EXCL. RADON & U
OZARK	MO5024444	OZARK CO PWSD 1	COMBINED RADIUM (-226 & -228)
			GROSS ALPHA, EXCL. RADON & U
PERRY	MO4024455	PERRY CO PWSD 1	COMBINED RADIUM (-226 & -228)
			GROSS ALPHA, EXCL. RADON & U
ST CHARLES	MO6030484	COUNTRY ESTATES	COMBINED RADIUM (-226 & -228)
			GROSS ALPHA, EXCL. RADON & U
	MO6036136	TARA OAKS MANOR ASSOCIATION	GROSS ALPHA, EXCL. RADON & U
ST FRANCOIS	MO4010087	BONNE TERRE	GROSS ALPHA, EXCL. RADON & U
			COMBINED RADIUM (-226 & -228)
	MO4036059	TERRE DU LAC	COMBINED RADIUM (-226 & -228)
TANEY	MO5301550	BRIARWOOD & REDBUD SHORES WATER ASSOCIATION	GROSS ALPHA, EXCL. RADON & U

IV. Surface Water Violations

The following systems violated the Surface Water Rule, Treatment Technique for Turbidity or other surface water requirements in the months or annual period indicated.

County	ID#	System Name	Period	Violation
CASS	MO1010301	GARDEN CITY	May, June	Combined Filter Effluent Turbidity
DEKALB	MO1010510	MAYSVILLE	June, July, August, September	Combined Filter Effluent Turbidity
GRUNDY	MO2010796	TRENTON MUNICIPAL UTILITIES	August	Combined Filter Effluent Turbidity

APPENDIX B - Chronic Major Monitoring

The following systems had three or more major monitoring violations of the Total Coliform Rule in 2015.

County	System Name	PWS ID #	Months
BARRY	DOLLAR GENERAL #15781	MO5283142	April, June, August
BENTON	BB BAR & RESTAURANT	MO3210256	January, March, May, September, December
	HEAD WATERS MOTEL	MO3190902	March, April, May
	HIDDEN VALLEY MHP	MO3262156	January, February, March, April, May, June, July, August, September, October, November, December
	T T CAMPGROUND	MO1242804	January, February, March, April, May, June, July, August, September, October, November, December
CAMDEN	BAYMONT INN & SUITES	MO3190958	March, August, October
	COUNTRY MEADOWS ESTATES	MO3041122	February, March, April, May, June, July, August, September, October, November, December
	MARINERS PIER 31 YACHT CLUB	MO3212445	May, June, September
	NEW LIFE CHURCH OF THE NAZARENE	MO5273016	June, July, August, September, December
	NIANGUA FALLS	MO3218236	May, July, August
	SWISS VILLAGE CONDO	MO3238050	March, April, June
	ZACK WHEAT AMERICAN LEGION POST 624	MO3282519	June, July, October
CAPE GIRARDEAU	CLASS ACT FAMILY FITNESS	MO4283006	January, February, March, April, May, June, July, September, December
CHRISTIAN	GOLD RIDGE NORTH	MO5033098	February, April, May, June, August, October
CRAWFORD	CUBA LAKES GOLF AND COUNTRY CLUB	MO3202538	January, July, September, December
DALLAS	RIDGEVIEW ESTATES	MO5033116	September, October, November
DENT	LUMBERYARD FAMILY RESTAURANT	MO4213054	April, September, October, November
FRANKLIN	NAT ASSOC INTERCULTURAL FAM MISSION INC	MO6283011	August, November, December
GASCONADE	EMMAS CAFE AND BAKERY	MO6213044	January, March, April, May
	SCHAEPERKOETTER SALES	MO6203130	February, March, April
GREENE	COUNTRY ESTATES MHP	MO5048237	February, March, April, May
HOWELL	DOLLAR GENERAL #14060- CAULFIELD	MO4283136	March, April, May, June
JACKSON	STONECROFT MOBILE HOME COMMUNITY	MO1040005	January, February, December
LAWRENCE	BAUMERS FOOD MART	MO5292361	September, November, December
	SUNSET DRIVE IN	MO5280547	April, July, August
LINCOLN	OLNEY TAVERN	MO6210657	March, April, June
MILLER	BIKINI BAY	MO5213069	May, August, September
	CAMP BAGNELL	MO3241749	June, July, September, October
	RED OAK INN	MO5213131	January, February, March, April
MORGAN	DOLLAR GENERAL #13332	MO5283140	March, May, August
	THE VILLAS OF HARBOUR HILLS	MO5031482	March, September, November
NEW MADRID	LILBOURN	MO4010468	February, April, August
NEWTON	UNDERCLIFF	MO5211145	August, September, October, November
PETTIS	CRESTVIEW MHP	MO3048254	April, June, July, December
REYNOLDS	BLACK RIVER LODGE INC	MO4190874	June, July, September
SCOTT	BLODGETT	MO4011179	September, October, December
ST FRANCOIS	C & L RENTALS LLC	MO4212391	May, June, July
ST LOUIS	BALLWIN RIDGE HEALTH & REHAB	MO6061615	September, October, December
	JAY HENGES RANGE	MO6140960	March, April, October
STONE	ANTLERS RESORT & CAMPGROUND	MO5190933	April, May, June
	CROSS ROADS STORE	MO5292589	January, February, March, April, May, June, July, August, September, October, November, December
	DEER RUN STORE	MO5190611	October, November, December
	KIMBERLING AREA SENIOR CENTER	MO5282512	March, July, October, November
	SKYVIEW SUBDIVISION	MO5031613	January, February, March, April, May, June, July, August, September, October, November, December
TANEY	BLUE HAVEN RESORT	MO5191016	March, September, November
WASHINGTON	ROGUE CREEK UTILITIES	MO4036318	May, June, October, November
WEBSTER	DIGGINS APOSTOLIC CHURCH	MO5272948	January, May, October
	EAGLE STOP	MO5258117	February, April, August, November, December

Appendix C

Major Repeat Monitoring Violations

The following systems had major repeat monitoring violations for the months listed. A major repeat monitoring violation occurs when a routine sample tests positive for total coliform bacteria and that system fails to submit any follow-up, or repeat, samples as required.

County	ID#	System Name	Month(s)
BARRY	MO5283094	DOLLAR GENERAL #4022	May
	MO5283142	DOLLAR GENERAL #15781	April
CAMDEN	MO3180637	RICHLAND DIVERSIFIED INDUSTRY	January
	MO5031533	GREEN ACRES MOBILE HOME PARK	December
CHRISTIAN	MO5036305	PIPPINVILLE & OAK PARK OWNERS ASSN	July
DALLAS	MO5210063	FORT NIANGUA RIVER RESORT	August
DOUGLAS	MO5192943	LOST CABINS RESORT	July
HICKORY	MO5251418	REMINGTON RANGE	September
JASPER	MO5010665	PURCELL	October
JEFFERSON	MO6203139	WOLFFS SOFTBALL HAVEN	October
LAWRENCE	MO5231809	3V CORPORATION	December
MARIES	MO3242408	TURKEY HILL RANCH BIBLE CAMP	October
MCDONALD	MO5272723	NEW LIFE FELLOWSHIP CHURCH	April
MILLER	MO5212698	CONSTRUCTION SITE BAR & GRILL	March
	MO5283144	OSAGE RIVER FARM INC	July
MORGAN	MO5243147	BEACHWOODS CAMPGROUND	September
NEWTON	MO5033107	SHADY LANE SUBDIVISION	December
	MO5211719	HWY 59 CAFE	September
REYNOLDS	MO4190874	BLACK RIVER LODGE INC	September
ST CLAIR	MO5212121	WILDFLOWER INN	October
STONE	MO5031278	MILLWOOD ESTATES PROP OWNERS ASSN	December
	MO5031446	STONE CO COUNTRY MEADOWS HOA INC	November
	MO5036071	WOOD RIDGE ESTATES	June, August
	MO5191312	CALM WATERS RESORT	November
	MO5199993	CREST LODGE RESORT	August
TANEY	MO5191610	PINE VALLEY RESORT	July
	MO5240145	CLEVINGER BRANCH MEMBERS CORP	April
WRIGHT	MO5172799	MOUNTAIN GROVE MENNONITE CHURCH & SCHOOL	March

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